

An Account of some BOOKS.

- I. *De ANIMA BRUTORUM Exercitationes duæ, prior PHYSIOLOGICA, altera PATHOLOGICA, Auth. Thomæ Willis M.D. Philos. Natur. Prof. Sidlej. Oxon. nec non Med. Coll. Lond. & Soci. Reg. Socii. Oxonii, d. 1672. in 4º.*

WHat the Learned Author of this difficult Argument had heretofore promised, he now in this Book with much care performeth; which is the *Pathology of the Brain, and the Nervous kind*, explicating the Diseases that affect it, and teaching their Cures; together with some previous Physiological Considerations of the *Soule of Brutes*.

And because it may, by some, be thought somewhat paradoxical, that he assigneth to that Soul, whereby both Brutes and Men have life, sense, and local motion, not only extension, and as 'twere Organical parts, but also peculiar Diseases, and appropriate Cures; and because also he distinguishes this meerly vital and Sensitive Soul from the Rational, to which he makes it subordinate, and so maketh man a Double-soul'd Animal; he maketh it first of all his business to clear these matters, and to free them from what may seem offensive in them.

In the doing of this he denieth not the Corporeity of the Brutal Soul, esteeming, that both by considerable Arguments, and by very ample, ancient and modern, Suffrages, the same may be evinced; and besides, that its *Bipartition* is by a necessary consequence deducible from the *flammeous* Life of the *Blood*, and the *lucid* or *Æthereal* substance of the *Animal Spirits*; both which he hath formerly asserted, and endeavoured to prove. For, if it be granted him, that the *Vital* portion of this Soul, lodging in the *Blood*, be a kind of *Fire*, and the *Sensitive* part be nothing but an Aggregate of *Animal Spirits*, diffused all over in the *Brain* and *Nerves*; he draws this consequence, That the Soul of a Brute, co-extended to the whole Body, hath not only many and distinct, but also somewhat dissimilar, parts. And if it be objected, that the Soul of a Brute is immaterial, because it perceiveth, or is aware that it feels, Matter seeming incapable of Perception; he

T t t answers,

answers, That that would be very probable, if that Perception did exceed the bounds of things material, and were of a higher pitch, then what is generally ascribed to Natural Instinct, or *Idiosyncrasis*: Adding, that none is like to undertake to prove, that the Omnipotent Maker, and First Mover, and Constant Governour of all things should not be able to impress such powers upon Matter, as might be proper and sufficient to perform the functions of the Sensitive life.

And as to what he further asserts, That some people are more, yea sooner and rather sick in their Soul, than in their Body; (whereas Physicians do commonly in Schools refer the principal Seats of all Diseases to the solid parts, and the humors, and vital spirits;) in this he speaketh consonantly to his *Hypothesis*: For, since that that Soul hath a material Being co-extended to the Body, and peculiar parts, powers and affections, he rationally concludeth, that it is subject also to preternatural affections, and frequently needs the Physicians aid.

Besides, he esteems to have made it out in his *Pathology*, That the Corporeal Soul extends her Diseases not only to the Body, but also to the *Mind* or the Rational Soul, and often involves the same in her defects and perturbations.

Moreover, he thinks to have also proved from reason and authority, That there are in Man two distinct Souls, subordinately; and esteems this opinion to be so far from being Heretical or pernicious, that on the contrary he hopes, it will prove altogether Orthodox, and conducive to a good life, and a powerful confutation of Atheism.

But to the end that the Author might the better inform his Reader of the Corporeal Nature, and the *flammæus* and *lucid* parts, and the affections of the same, he found it necessary *both* to describe the vital Organs of divers Animals, by whose operation the Lamp of Life is maintained; and to represent also the Brains of those they call perfect Brutes, and of Man, discovered by him as to their inmost recesses, and their secret and smallest *ductus's*. By which manifold and comparative Anatomy, as the manifold and wonderful wisdom of the Creatour is manifested; so are by the same discovered, even in the smallest and most despicable Animals, not only mouths and limbs, but also hearts, being as 'twere so many altars and hearths to perpetuate this vital flame. Here
the

the Reader will meet with very skilful and accurate Dissections of the *Silk-worm*, *Oyster*, *Lobster*, *Earth-worm*; as also of divers Brains; and *first*, of that of a *Sheep*, in a manner excarnated, to make the Medullar streaks, and its inmost fabrick to be seen: And *secondly*, of a new one of an *Humane* Brain; where, a Section being made through the *falx*, the *Corpus callosum* and the *Fornix*, and their parts displayed and orderly laid open, are exhibited the streaked bodies, as also the Optick and Orbicular prominencies, &c. That so by confronting these Brains, the vast difference of the Soul of a Brute and that of a Man may the better be shewn.

Concerning the *Pathology* of this Author, he confesseth, that in delivering the Theories of Diseases he hath relinquish'd the Old way, and produced mostly new *Hypotheses*; which being founded and established upon true Anatomical Observations, give a better account of the *Phænomena* of the sick, indicate more aptly the causes of symptoms, and suggest properer waies of curing them. But as to Remedies and his Therapeutical Method, though therein he doth not with others scrupulously insist in the footsteps of the Ancients; yet he rejects nothing that hath been settled by sober Authority, and by long Experience; adding thereunto many things invented by late Experience, and by Analogy. All which he hopes will prove useful both for improving Medical knowledge, and the happier curing the Diseases of the Head; which he enumerates, and discourses upon, both as a Naturalist and a Physician.

II. *Suite des nouvelles Experiences sur la VIPERE; avec une Dissertation sur son VENIN; par Moyse Charas. A Paris 1671, in 8°.*

THis is a Sequel of Experiments, made by the skill and industry of the same, that was the Author of the Tract, entitled *Nouvelles Experiences sur la Vipere*, formerly described in *Numb. 54.* and since English'd out of French, and printed by Mr. Martyn at the Bell in *Pauls Church-yard*. It is made by the Author in his own defence against a Letter of Signor *Redi*, published in Italian against some Experiments of the Author's former Book, and described in *Numb. 57.* In it M. *Charas* expresseth, that he is so far from changing his opinion upon his examining

Signor *Redi's* Letter, that he is much more confirmed in it.

The Controversie consists chiefly in this: 1. That Signor *Redi* will have the Jellow liquor contain'd in the bags of the Teeth-gum of Vipers to be the only and true seat of their Venom. 2. That this liquor is indeed not Venomous being taken at the mouth, but only when let into a wound, made either by the live Animal, or even by a dead ones teeth, thrust into ones flesh after it is dead. 3. That the same Juice drawn from a dead Viper, as well as from a live one, is alwaies venomous, if it pass into a wound and mingle with the blood of the wounded Animal, whether it be liquid, or dried to powder. 4. That it kills generally all sorts of Animals being wounded, and receiving of this liquor into the wound. Whereas M. *Charas* asserts, 1. That the Venom of Vipers is on'y in the enraged Spirits. 2. That the Jellow liquor, as well of a live and even a much angered Viper, as of a dead one, hath no Venom at all in it, neither in the biting, nor when taken inwardly, nor let into a wound and mixt with the blood, nor any other way; and consequently that it kills and infects no kinds of Animals, but is a pure and very innocent *Saliva*.

To make good these assertions, M. *Charas* affirms to have made new Experiments, in the presence of two or three hundred persons, Physicians and others, capable to Judge, and of great veracity; and to have found abundant cause to adhere to the result, he had made from his former tryals, *viz.* That never any one Animal of all those, he wounded, died of the Jellow liquor let into the wounds, though drawn hot from the bags of the gums of Vipers much enraged. These Experiments are at length described in his Book.

If it be said in favour of Signor *Redi*, That the diversity of Climats, or of food also, may change the nature of Vipers, and cause that manifest difference between the Experiments; M. *Charas* answers, that it cannot be, That the nature of the Jellow liquor, and that of the Spirits should be so quite changed; because, that in *France* the same marks are found in the Jellow liquor with those described of *Italy*, and that the French Vipers do, without an intervention of the said liquor, kill as readily, as those of *Italy* can do. And he adds, that he hath verified it by very many Experiments, That all the Vipers of *France*, though taken in very different

different places, and those often distant from one another above an hundred and twenty Leagues, do all kill equally.

And, as to the bilious expirations of Vipers, which may intervene with the Jellow liquor and render it venomous, he saith, That that is nothing but the angred Spirits under a disguise.

Now touching the enraged Spirits of Vipers, our Author, though he calls them Spiritual, or not Material, and maketh their Venom not visible nor palpable, yet certainly he will be understood to speak for in comparifon to the Jellow liquor, which is a *visible* body; for, 'tis beyond all doubt, that those irritated Spirits are corpuscles, though not such as may be seen and handled like the said liquor, nor such as you may assign a particular place to in the body of the Viper, where they lodge; though it may be said, that being raised and severed either from the mass of the blood, or rather from the whole habit of the body, they rendezvouze in the head, being stirred up by the concussion and great commotion, which the Viper feels in her whole body when vexed; whereupon follows an eagerness of being revenged for the ill done them, and then a quick and fiery action of the Spirits thus enraged. Nor can he mean, that these Spirits have neither place nor extension; for, how could they part from the Viper without having been in her body; and, how could they enter into the body of the Animal bitten without being there.

Further, to illustrate his notion of the Idea of the Viper for Revenge, he alledgeth the imagination of terrour by a Toad impressed in a *Herret*, which having seen and been seen by that ugly Animal at a certain season of the year, and that alwaies in Summer, cannot avoid running round about it, crying out aloud as if it call'd for succour, whilst the Toad remains unmov'd with its throat open, and being at length, by that imagination, forced to surrender it self into that throat; as he affirms to have seen himself, and to have even kill'd the Toad at that very instant, and so saved the *Herret*, which ran away. He alledgeth likewise a Mad Dog who can communicate his malignity to all sorts of Animals, none excepted: And why not then Vipers, convey their angry Spirits into such Animals as they meet with, and by them kill those they have bitten? Which, he saith, they execute by the perturbation and corruption, they introduce in the whole mass of blood, forasmuch as they obstruct the circulation and communication of the

the natural Spirits through the body. He adds the example of Men, capable to cause a gangrene and death it self by biting in choler ; whereas no such accident comes to pass, when they chance to bite one without choler. He concludeth this discourse with the sting of a *Tarantula*, which he conceiveth to be accompanied with an imagination, so strongly impressed in persons that are stung by it, as that their Spirits are perverted, and made conform to the agitating nature of the same, and constrained at certain times by certain tunes to dance, and to return to such motions every year. To confirm which, he relateth an example of a *Neapolitan* Souldier, who, he saith, hath been these four years in the *French* Infantry, and is still in the Royal Regiment of *Roussillon*. This person never failed to feel every year at a determinate time (*viz.* about the 24th. of *July*) the effects of that sting, which he had received before he came into *France*. And when the Ideas of the sting were found exalted to a degree capable to produce their effects, he began to dance, and would hear without interruption the Violins, which the Officers of that Regiment caused to be play'd for him out of charity ; to which he answer'd continually, keeping his time very well, without being tired, during three daies, eating and drinking without interrupting his dances, and being very impatient at any discontinuance of the play of the Violins. But on the fourth day his eagerness to dance abated, when he remembred all he had done, and knew all that were about him ; after which time, he passed the rest of the year without any inclination to dance. This Souldier, he saith, to have been seen thus to dance every year by thousands of people, and particularly in the Camp Royal A. 1670, where the King himself, and the whole Court saw him.

Lastly, M. *Charas* esteems, that Signor *Redi* would do well, if, for the satisfaction of the Publick, without standing up any longer for the venomousness of the Jellow juice, which he thinks hath been so rationally contested with him, he would take the pains to look after some other thing, that might be common to the Vipers of *France* and *Italy*, and that might have the same disposition of matter, the same power of acting nimbly, and deserve to be equally declared to be the true seat of their Venom ; that so Signor *Redi* might as validly exclude from it the enraged Spirits, as he (M. *Charas*) now does the Jellow liquor : But if he can find none such,

our

our Author thinks, he can have no ground to maintain his opinion, or contend against that of the vexed Spirits any longer.

III. *The CHIRURGICAL and ANATOMICAL Works of Paul Barbette M. D. Practitioner at Amsterdam; together with a Treatise of the PLAGUE. English'd out of Low-Dutch. London 1672. in 8^o.*

THE skilful and diligent Author of this Book seems to have set down therein that Practice, which Reason and Experience, after a careful reading of the best Authors, and an exact Observation of several Operations, had taught him to be the safest, convenientest, and most easie. This he hath done in a few Chapters, rather inserting in short his Observations in the very descriptions of the *Diseases*, than to waste the Readers time with a prolix Discourse; to the end he might not repeat in *particular* Diseases, what he had first set down in *generals*.

Tumors, Wounds, and Ulcers, which neither in Cause nor Cure differ, he hath reduced under one head; contrary to what most Writers use to do, who only from the difference of the Part and Member affected difference the Diseases, which afterwards, giving them new names, they multiply without any use; and so they render that Art, which is difficult enough of it self, much more difficult.

Those Medicaments, which he hath delivered in this Book, though they be few in number, yet are by some able Judges esteem'd of great vertue; which the Author affirms to have found out by vast pains and no small charges, and for the safety of which he alledgeth the confirmation of daily practice.

And because *Anatomy* is the main foundation of *Chirurgery*, the Author hath thought good to annex so much of it, as may be necessary for the Art; of all which he shews the Uses of it in the same.

He subjoyns also a small Treatise of the *Plague*; discoursing of its Causes, Symptoms, Observations, and Cure; and illustrating all with divers select Practical Observations.

By Samuel Boerhaave, M. D.

IV. *The*

IV. *The AMERICAN PHYSITIAN; or a Treatise of Roots, Plants, Trees, Shrubs, Fruit, Herbs, &c. growing in the English Plantations in America: whereunto is annexed a Discourse of the Cacao-nut-Tree, and the use of its Fruit.* By W. Hughes. London 1672. in 120.

THough the Author of this Tract do only promise in the Title of it to give an Account therein of the Vegetables growing in the *English* Plantations of *America*; (which is of good use, forasmuch as it may make a part of the Universal History of Nature, now more than ever laboured after by the generous Philosophers of this Age;) yet he indeed performs more: since he presents his Readers with several particulars, that are without the Sphere of the Vegetable Kingdom; such as are the *White-Coral-Rocks*, to be found upon the Coast of Jamaica, as well as in other parts of America; the *Sea-star-Fish*; the *Allegator*; the easy way of *making* good *Salt* in Jamaica: For the particulars of all which, we refer to the Book it self.

ERRATA in Numb. 82.

Page 4051. line 17. read, *are* 1044, instead of, *are* 144. Ibid. l. 34. r. *and the other two*, instead of, *50 of them*.

L O N D O N,

Printed for John Martyn, Printer to the Royal Society. 1672.